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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/941,313	08/29/2001	Robert J. Burnham	10541-451	6595	
29074	7590 05/18/2005		EXAM	EXAMINER	
VISTEON			GENACK, MATTHEW W		
C/O BRINKS	HOFER GILSON & LI	ONE			
PO BOX 10395			ART UNIT	PAPER NUMBER	
CHICAGO, I	L 60610		2645	*	
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DATE MAILED: 05/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

				16/		
		Application No.	Applicant(s)	•		
		09/941,313	BURNHAM ET AL.			
	Office Action Summary	Examiner	Art Unit			
		Matthew W. Genack	2645			
Period fo	The MAILING DATE of this communication or Reply	appears on the cover sheet w	ith the correspondence address			
THE - Exte after - If the - If NO - Failt Any	ORTENED STATUTORY PERIOD FOR RE MAILING DATE OF THIS COMMUNICATIO insions of time may be available under the provisions of 37 CFR SIX (6) MONTHS from the mailing date of this communication. It is period for reply specified above is less than thirty (30) days, a period for reply is specified above, the maximum statutory per ure to reply within the set or extended period for reply will, by state reply received by the Office later than three months after the middle patent term adjustment. See 37 CFR 1.704(b).	N. R 1.136(a). In no event, however, may a reply within the statutory minimum of thir riod will apply and will expire SIX (6) MON atute, cause the application to become Al	reply be timely filed  ty (30) days will be considered timely.  ITHS from the mailing date of this communication  BANDONED (35 U.S.C. § 133).	on.		
Status						
1)  🔀	Responsive to communication(s) filed on 1	1 March 2005.				
'=	· · · <u> </u>	his action is non-final.				
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposit	ion of Claims					
5)□ 6)⊠ 7)□	Claim(s) 1-20 is/are pending in the applicate 4a) Of the above claim(s) is/are without claim(s) is/are allowed.  Claim(s) 1-20 is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction and	drawn from consideration.		·		
Applicat	ion Papers					
10)⊠	The specification is objected to by the Example The drawing(s) filed on 11 March 2005 is/ard Applicant may not request that any objection to Replacement drawing sheet(s) including the contraction of the oath or declaration is objected to by the	e: a)⊠ accepted or b)⊡ ob the drawing(s) be held in abeyar rection is required if the drawing	nce. See 37 CFR 1.85(a). (s) is objected to. See 37 CFR 1.121	(d).		
Priority (	under 35 U.S.C. § 119					
•	Acknowledgment is made of a claim for fore  All b) Some * c) None of:  1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the papplication from the International Bur	ents have been received. ents have been received in A priority documents have been	pplication No			
. * (	See the attached detailed Office action for a	list of the certified copies not	received.			
Attack	4(4)					
Attachmen	et(s) ce of References Cited (PTO-892)	4) Interview	Summary (PTO-413)			
	ce of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(	s)/Mail Date			
3) Infor	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/ er No(s)/Mail Date		nformal Patent Application (PTO-152)			

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1, 5-6, 10-11, 15-16, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kavenik, U.S. Patent No. 4,313,208, in view of Loyd *et. al.*, U.S. Patent No. 6,462,775.

Regarding Claims 1, 6, 11, and 16, Kavenik discloses an audio entertainment and information system for the cabin of a commercial passenger aircraft (Column 7 Lines 16-20, Column 7 Lines 63-65, Fig. 1). There are several lamps, each connected to the aircraft's AC power source, for the purpose of illuminating the cabin's interior (Column 10 Lines 33-40, Fig. 1). Another component of the entertainment system is the radio frequency audio transmitter (Column 7 Lines 40-42, Column 8 Lines 32-54, Fig.

1). There exists an audio source, which provides audio signals to the transmitter, which is adapted to receive these signals and to transmit them throughout the passenger cabin by feeding an appropriate antenna system (Column 8 Lines 12-19, Column 17 Lines 56-60, Fig. 1, Fig. 10). Headsets are provided for the passengers, whereby said headsets are directly connected to equipment with the means for receiving the RF signals, controlling the volume, and selecting the audio channel (Column 7 Lines 23-26, Column 9 Lines 42-62, Fig. 3).

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Kavenik does not expressly disclose placement of transmitters in the lamps, said transmitters connectable to the audio source and adaptable to receive information from said audio source and transmit signals containing said information within the vehicle's passenger compartment.

Loyd et. al. discloses a surveillance apparatus within a street lamp, said apparatus including an antenna and transmitter/receiver electronics (Abstract, Column 8 Lines 16-21, Column 10 Lines 31-40, Fig. 7).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Kavenik by using a lamp with a RF transceiver in the passenger compartment, said transceiver connectable to the audio source and adaptable to receive information from said audio source and transmit signals containing said information within the vehicle's passenger compartment.

One of ordinary skill in the art would have been motivated to make this modification because of the convenience and efficiency of combining two desirable vehicle devices into one device, thereby concealing the RF transmitter(s) from view of the passengers.

Regarding Claims 5, 10, 15, and 20, Kavenik in view of Loyd *et. al.* discloses every limitation of Claims 1, 6, 11, and 16, upon which Claims 5, 10, 15, and 20 depend, respectively, as outlined above. Furthermore, Kavenik discloses a wired connection between the audio transmitter and the audio source (Column 17 Lines 56-60, Fig. 10).

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3. Claims 2-3, 7-8, 12-13, and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kavenik in view of Loyd *et. al.*, further in view of Shamoon *et. al.*, U.S. Patent Application Publication 2003/0034897.

Regarding Claims 2, 7, 12, and 17, Kavenik in view of Loyd et. al. discloses every limitation of Claims 1, 6, 11, and 16, upon which Claims 2, 7, 12, and 17 depend, respectively, as outlined above.

Kavenik does not expressly disclose the use of LED transmitters as the audio transmitters of the audio entertainment system, nor does Loyd *et. al.* expressly disclose the use of LED transmitter with the lamps of the invention.

Shamoon *et. al.* discloses the use of a LED transmitter in conjunction with an entertainment center (0043 Lines 1-6, Fig. 5).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to use one or more LED transmitters of Shamoon et. al. in the audio entertainment system of the invention of Kavenik as modified by Loyd et. al.

One of ordinary skill in the art would have been motivated to make this modification because radiation from LED transmitters would not leave the aircraft and interfere with devices outside of said aircraft.

Regarding Claims 3, 8, 13, and 18, Kavenik in view of Loyd *et. al.* discloses every limitation of Claims 1, 6, 11, and 16, upon which Claims 3, 8, 13, and 18 depend, respectively, as outlined above.

Kavenik does not expressly disclose the use of an infrared transmitter as the audio transmitter of the audio entertainment system, nor does Loyd et. al. expressly

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disclose the use of an infrared transmitter in conjunction with audio signals in an entertainment system.

Shamoon *et. al.* discloses the use of an infrared transmitter in conjunction with an entertainment center (0038, Fig. 4).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to use one or more infrared transmitters Shamoon *et. al.* in the audio entertainment system of the invention of Kavenik as modified by Loyd *et. al.* 

One of ordinary skill in the art would have been motivated to make this modification because radiation from an infrared transmitter would not leave the aircraft and interfere with devices outside of said aircraft.

4. Claims 4, 9, 14, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kavenik in view of Loyd *et. al.*, further in view of Claesson *et. al.*, U.S Patent Application Publication 2002/0075965.

Kavenik in view of Loyd *et. al.* discloses every limitation of Claims 1, 6, 11, and 16, upon which Claims 4, 9, 14, and 19 depend, respectively, as outlined above.

Kavenik does not expressly disclose the use of digital signals in the audio entertainment system, nor does Loyd *et. al.* expressly disclose the use of digital audio signals.

Claesson et. al. discloses the use of digital audio broadcasting, whereby an analog audio signal is passed through an A/D converter at the broadcasting station (0093, Figs. 12a-12b).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Kavenik as modified by Loyd *et. al.* by broadcasting digital audio signals within the aircraft cabin, combined with the use of an A/D converter in the audio source as taught by Claesson *et. al.* 

One of ordinary skill in the art would have been motivated to make this modification because of the higher degree of information fidelity inherent in digital broadcasting.

## Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew W. Genack whose telephone number is 571-272-7541. The examiner can normally be reached on FLEX.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on 571-272-7547. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Matthew Genack

Examiner

Art Unit 2645

16 May 2005

Marken Gerock

SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2600